## **COOPERATIVE AGREEMENT**

511-A-00-04-00237-00

## SIXTH QUARTERLY REPORT 10/01/2005 - 12/31/2005

## **World Wildlife Fund**

Date Submitted: February 8, 2005





### Southwestern Amazon Moist Forest Ecoregion

### Valorization and Understanding of the Protected Areas of the Amboró - Madidi Corridor (CAM) in Order to Facilitate their Conservation

#### STRATEGIC GOALS AND OBJECTIVES

#### Goal:

Create a favorable climate among the local population of the Amboró-Madidi Corridor (CAM) by favoring their participation in the process for the creation and management of protected areas, their education, information and environmental awareness and the joint visualization of the natural attributes of the protected areas in relation to the environmental services and its consequent potential to support sustainable economic activities for the region in which they are found.

#### **Objectives:**

- <u>Conservation</u>: Achieve the effective support from local communities and regional authorities for the Altamachi Protected Area ensuring its confirmation and achieving its declaration (recognition of the national government through a Supreme Decree). The AP Altamachi was created by the "Prefectura de Cochabamba" under a scientific model of identification and characterization as well as a participatory process of consultation. With this, it is intended that one of the last and best preserved areas of the Yungas in Bolivia is placed under definitive protection and management, avoiding the advancement of deforestation within its limits.
- <u>Joint Planning:</u> Achieve the joint participation of the authorities and civil society in order to confront the threat of social and political opposition aimed at protected areas through the organization of joint activities and the search of synergies for individual activities:
  - CAM Coordinating Committee (CCCAM): Ensuring its continuity as an organism for discussion and technical planning and the gradual inclusion of additional authorities (Land Tenure, Popular Participation and municipalities when and if possible) and other local actors converting them in a forum for critical review and coordination.
- <u>Education, information and environmental awareness</u>: Consolidate the management of the Amboró Interpretive Center as a partnership model between protected areas and municipalities and as sources of education, information and environmental awareness for the local population.
- <u>Visualization of potential for sustainable economic activities</u>: Carry out a study regarding the value of the environmental services of the water forthcoming from two protected areas within the CAM that neighbor important cities for their valorization among

the local population and to offer information and ideas regarding sustainable economic alternatives for the users (municipalities, "regantes", businessmen and general population).

#### **COLLABORATORS/PARTNERS**

- \* SERNAP Servicio Nacional de Áreas Protegidas (National Service of Protected Areas)
- \* DGB Dirección General de Biodiversidad (General Directorate for Biodiversity)
- \* FAN Fundación Amigos de la Naturaleza (Friends of Nature Foundation)
- \* Tropico Asociación Boliviana para la Conservación (Bolivian Conservation Association)
- \* ICIB Instituto para la Conservación e Investigación de la Biodiversidad (Institute for Biodiversity Conservation and Research)
- \* CIDEDER Centro Integrado de Defensa Ecológica y Desarrollo Rural (Integrated Center of Ecological Defense and Rural Development)
- \* FUNDESNAP Fundación para el Desarrollo del Sistema Nacional de Áreas Protegidas (Foundation for the Development of the Protected Areas System)
- \* REMA Rescate en tus Manos (Rescue in your Hands)
- \* PNC Parque Nacional Carrasco (Carrasco National Park)
- \* APA Área Protegida Amboró (Amboro Protected Area)
- \* CI Conservation International
- WCS Wildlife Conservation Society
- \* TNC The Nature Conservancy
- \* CSF Conservation Strategy Fund
- \* Fundación Natura Bolivia Foundation Natura Bolivia
- \* CIDES Centro Integral de Desarrollo Económico y Social (Integral Center of Economic and Social Development)}
- \* DGMA Dirección General de Medio Ambiente (General Directorate for the Environment)
- DGCRH Dirección General de Cuencas y Recursos Hídricos (General Directorate for Watersheds and Water Resources)
- \* DGDF Dirección General de Desarrollo Forestal (National Directorate for Forestry Development)
- \* SEDUCA Servicio Departamental de Educación (Departmental Educational Service)
- \* ASITUR Asociación La Yunga de Turismo Responsable (La Yunga Association for Responsable Tourism)
- \* Local stakeholders Prefectures (Office for Natural Resources and the Environment Cochabamba), Municipalities (Municipality of Buena Vista and Municipality of Tiquipaya).
- \* OPIM Organización del Pueblo Indígena Mosetén (Mosetén Indigenous Peoples Organization)

SUMMARY PERIOD: 10/01/05—12/31/05

#### RESULTS BY OBJECTIVE AND ACTIVITY

Objective I: Creating a favorable working environment by raising public-local awareness regarding the Area's importance and in this way, supporting the process for the Supreme Decree ratifying the Altamachi Protected Area created by the Departmental Council of Cochabamba.

As per the Third Quarterly Report, and as a consequence of the derogation of the protected area status for Altamachi, the activities related to this goal were revised and the following were agreed upon:

- a. Institutional support for CIDEDER for improving their technical capacities.
- b. Support for the improvement of relations between promoters of the PA and neighboring populations
  - Work on the management of natural resources with the communities of Totolima and Carmen Pampa.
  - Collaborate with the Mosetene TCO, neighboring Altamachi, as a means to control the illegal logging which is currently the main conservation threat faced by the proposed Altamachi Protected Area.
  - Facilitating coordination between the Forest Superintendence and the OPIM.
- c. Hiring of two (2) farming and animal husbandry technicians as outreach and /or environmental promoters to work in Totolima and Carmen Pampa.
- d. Carrying out a baseline diagnosis regarding the social conflicts and thus be able to clearly identify the information needs as well as those for conflict resolution
  - Support the Prefecture's Office for Natural Resources and the Environment, so
    they bring together the inter-institutional commission that is responsible for
    discussing and agreeing upon measures to ensure the protection and sound
    management of Altamachi.
- e. A radio information and dissemination campaign regarding the values of the PA but also including programs of technical interest for the local population
  - Develop a communication strategy based on a rapid appraisal of the perception of local people regarding conservation issues and the Altamachi area. (Cancelled)
  - Establish a coordinating entity to lead the environmental opinion in Cochabamba but that is also the result of joint institutional efforts. (Cancelled)
- f. Support the process to obtain legal paperwork (Cancelled)

The progress achieved so far in the implementation of the aforementioned contract is described below.

#### a. Institutional support for CIDEDER to improve their technical conditions.

CIDEDER has received support during the last trimester for planning their activities and have also been accompanied in their meetings with the Municipality of Tiquipaya. We also facilitated the coordination between CIDEDER and CIDES, an NGO that works in the municipality of Morochata, to promote opportunities for dialogue aimed at the conservation and management of natural resources in this municipality. On the other hand, the hiring of the technicians that assumed the responsibility of the training and follow-up in the communities of Totolima and Carmen Pampa contributed to strengthening and expanding the capacities of the organization.

## b. Support for the improvement of relations between promoters of the PA (CIDEDER) and neighboring populations.

• Work on the management of natural resources with the communities of Totolima and Carmen Pampa.

The following activities were carried out by CIDEDER in the communities of Totolima and Carmen Pampa.

#### Support for sustainable agricultural production

- Preparation of a Productive Development Model.

The productive model was developed for the communities of Carmen Pampa and Totolima. The model was designed based on the evaluation of the family plots and together with each family, according to their farm, a personalized model was designed. By sharing the experience of the family models with the rest of the farmers, a development model for community production was established.

The main themes incorporated into the family production models are related to the ecological production, such as cero/minimum farming for soil conservation, incorporation of green plant matter on farming lands, production of organic liquid fertilizers and compost, crop rotation in the plots, associated crops, controlling burning of small farms and others.

The families have already started applying some of the practices set forth in the productive models such as minimizing farming and incorporation of green plant matter in the soil, crop rotation and agro forestry plantations at the edge of each plot.

#### - Community training.

Training was continued in the communities of Totolima and Carmen Pampa on issues such as, incorporation of green plant matter on farming land, production of organic liquid fertilizers and compost, controlling burning of small farms among others. These are all considered in the establishment of productive models for each family and the community.

- Support to the agriculture and forestry component.

#### Agriculture component

Follow-up was provided to the organic vegetable gardens. With the participation of 36 families from the communities of Carmen Pampa and Totolima, 9.26 ha were consolidated (85.2 % more than what was planned); of which 3.81 ha correspond to vegetable crops and 5.45 ha for more important crops such as beans. The increase in the area cultivated was related to the conversion of abandoned land that was considered to have a low productive performance.

Approximately 18 families from Carmen Pampa cultivated 24 ha and in Totolima, another 18 families cultivated 19.5 ha, showing that the availability of land in both communities is reduced.

To guarantee the continuity of the vegetable gardens, high quality vegetables and bean seeds were provided from which they can generate lesser quality seeds yet that are registered and certified allowing them to have a supply for 5 years. In addition, to guarantee sustainability training was provided in the management and

production of seeds including post harvest actions for the adequate storage of seeds.

The follow up activities regarding the crops showed that so far they are developing well and the presence of plagues was minimal.

Information on the crop performance was not yet obtained because they have not yet been harvested however this information will be obtained further on from each farmer's own records.

#### Forestry component

The tree nursery in Carmen Pampa (capacity for 50,000 plants) has produced 7500 plants (Laurel 4900 and Cedro de altura 2600).

Alter awareness efforts were carried out, areas to be reforested have been identified in Carmen Pampa (189 ha) and in Totolima (60 ha). So far 7 ha in Carmen Pampa and 2 ha Totolima were enriched.

The research ("Study on the natural regeneration of forest species in danger of extinction in the community of Carmen Pampa in the Municipality of Tiquipaya" and "Estimation of the carbon capture in the natural forests of the community of Carmen Pampa in the Municipality of Tiquipaya") supported by the Municipality of Tiquipaya and CIDEDER are currently at an advanced stage in terms of field work and to date are working on analyzing initial information gathered.

#### - Support to honey production.

During this phase of the Project, four training workshops on management of beehives using modern techniques were offered to the farmers, emphasizing the use of equipment such as a centrifuge, wax stamper and others that were new to the producers yet necessary to their activities.

The apicultural activity is the most important in terms of generating income in the communities of Totolima and Carmen Pampa making, their sole family income.

By supporting the honey production it was possible to improve the management systems through the implementation of apiculture equipment for 36 families from the 2 communities (Carmen Pampa and Totolima). Honey production has improved in terms of its quality obtaining a cleaner product with fewer impurities. The number of hives increased through the construction of new boxes, and by the end of the year there were 6 boxes per family for which each provided their own fuel and sawn boards (allowed by the internal regulations of the use of wood). A total of 108 boxes were made (including their tops and bottoms) and 1188 frames.

Between August 2004 and November 2006 the Project in the community of Carmen Pampa increased the number of bee hives in production from 48 to 104, increasing its production from 1,764 kg of honey to 3,528 kg. And, during this same time period in the community of Totolima increased from 369 to 447 bee hives, increasing its production from 13368 kg of honey to 17976 kg.

An important aspect that is worth emphasizing is the increase in the consumption of honey per family. It is estimated that in Carmen Pampa each family consumes approximately 25 % of its total production, while 25 % is invested in transportation costs from the community to the commercialization centres (Cochabamba) and 50 % of the total production makes up the most important income for the family.

#### Monitoring and control of wood extraction

CIDEDER and the OPIM signed an inter-institutional agreement which contemplates as its general objective to collaborate in the protection and management of natural resources from the north-eastern sector in the area where the Santa Elena and Cotacajes rivers intersect with the Mosetén TCO.

This agreement served to strengthen the activity carried out on behalf of the 4 park guards who fulfilled their work until the end of December 2005, time during which aside from carrying out control efforts in the territory also monitored the quantity of illegal wood leaving the Santa Elena and Cotacajes Rivers.

The estimated amount of illegal timber exiting the area between September and October is the following: Mara 50,000 feet, Cedro 75,000 feet; Roble 40,000 feet; Quinaquina 20,000 feet; Wasicucho 15,000 feet; Gabun 15,000 feet and Tarara 10,000 feet.

CIDEDER facilitated a meeting between the SIF from Cochambamba and the OPIM to establish inter-institutional coordination between both. As a result of this meeting an agreement was signed between the two organizations with the objective of achieving the conservation and protection of the environmental and natural resources of the Mosetén TCO and surrounding areas. The most important points of the agreement are the coordination to promote sustainable forest management as well as efforts to inspect and control the area.

#### Basic environmental education

Regarding the training events on environmental issues for the communities of Totolima and Carmen Pampa, a training booklet was produced and motivational techniques were used to recover and appreciate local knowledge related to the environment. The booklets covered aspects ranging from general environmental problems, their consequences and factors that disturb and alter the environment. On the other hand, a didactical game designed by CIDEDER was used allowing the participation of the entire community (children and adults), to reinforce the training and focusing on local conflicts associated to each one of the conservation objects identified in the Site Conservation Planning.

## c) Hiring of two (2) farming and animal husbandry technicians as outreach and /or environmental promoters to work in Totolima and Carmen Pampa.

The technicians hired during the first trimester had under their responsibility the execution of the activities that are described in the previous point.

On the other hand, through CIDES, two technicians, an environmental specialist and a communications person were hired to seek dialogue with the municipality of

Morochata regarding natural resource management and conservation. The activities implemented are described below. However, during the Project it was also necessary to take on other activities such as the delivery of 3000 seedlings (1500 eucalyptus and 1500 pine trees) to the community of Chinchiri. This delivery was accompanied with training and a brochure to guide on how to plant the seedlings. At the same time, 700 pine seedlings were delivered to the school in Chinchiri and the rest were equally divided among the 4 unions.

- d) Carrying out a baseline diagnosis regarding the social conflicts and thus be able to clearly identify the information needs as well as those for conflict resolution.
- Support the Prefecture's Office for Natural Resources and the Environment, so they bring together the inter-institutional commission that is responsible for discussing and agreeing upon measures to ensure the protection and sound management of Altamachi.

An over-flight of the northern part of the municipality was sponsored, at the request of the Municipal Government of Tiquipaya,. Four municipal authorities participated, among them the Mayor and the president of the City Council.

The benefit of the over-flight was that it opened up opportunities or reinforced the idea of creating a reserve in this very pristine area. In the subsequent minutes from the City Council, the following was stated: the need to carry out land title clearing for the communities involved in the future Reserve and secondly, the need to define as soon as possible the consolidation of the municipal limits, as well as those for the Reserve, in order to legally take possession of an area representing incredible biological value.

CIDEDER supported the municipality by providing a GIS technician to develop maps and basic cartography to help delimit the municipality of Tiquipaya area of jurisdiction to reinforce negotiations made on behalf of the committee discussing the limits. At the same time, information was obtained to develop a map and basic cartography for the Tiquipaya Municipal Flora and Fauna Reserve.

As a result of the above mentioned and also due to various meetings between the municipal government and the communities located in the northern section of Tiquipaya and CIDEDER, the Municipal Government of Tiquipaya, with the support from these communities, issued the municipal regulation 049/2005 for the creation of the Tiquipaya Municipal Flora and Fauna Reserve which was based on a technical proposal that includes cartography, maps and a technical justification for its creation.

On the other hand, in the Municipality of Morochata, CIDES sought out opportunities to approach the CSUTCOA ("Central Única de Trabajadores Campesinos Originarios de la Provincia Ayopaya" -Native Peasant Workers Administration for the Province of Ayopaya-) in order to discuss and try to conform a permanent coordinating entity. CIDES had meetings with the General Secretary for the CSUTCOA as well as with other staff members from the CSUTCOA and with the Mayor. As a result of these meetings, CIDES was invited to participate in the

meeting held by the CSUTCOA open to the public, to explain the objectives it intents to carry out in the northern region of the province of Ayopaya.

From this a schedule of meetings was set up with leaders and communities.

In previous meetings, leaders expressed that they did not want a coordination entity that was not part of the syndicate and that what they needed was that an organization with these characteristics should be close to the unions. Thus it was agreed that within each syndicate an office for natural resources and the environment would be established and it was also made clear that natural resources should be managed by the syndicate organizational structure. With this in mind, the reasoning and summons for the workshop on natural resources and the environment was changed.

A workshop on natural resources and the environment was also carried out and demanded considerable effort in convoking all of the leaders from the province.

Workshops with the communities of Villa and Vinto, Incacasani, Jatun Rumi, Rinconada, Colquechaca, Rosa y Valle and Cocapata were held. During these workshops training was also provided on natural resources and the environment, using support material (a booklet previously designed by CIDES), and the local unions were persuaded to establish their portfolio for natural resources and the environment. It is hoped that the secretaries for natural resources and the environment later on become an association of secretaries. It was possible with the majority of the communities to arrive at an acceptance regarding the conformation of a secretary for natural resources and the environment. The process is currently stopped but will continue with the establishment of portfolios for natural resources and the environment in other unions.

A commitment was achieved to sign a provincial agreement to work on natural resources and the environment yet that does not exclude also working on productive issues and those for social support.

- e) A radio information and dissemination campaign regarding the values of the PA but also including programs of technical interest for the local population.
- Develop a communication strategy based on a rapid appraisal of the perception of local people regarding conservation issues and the Altamachi area.
- Establish a coordinating entity to lead the environmental opinion in Cochabamba but that is also the result of joint institutional efforts.

The previous trimester report indicated that this activity was cancelled due to a lack of funds.

Objective II: Participation in the planning and participation process:

#### **Activity 2.1.: CAM Coordinating Committee (CCCAM)**

a. Ensure the functioning of the CCCAM and facilitate the participation and leadership of the DGB and SERNAP in the CAM Coordinating Committee.

DGB is implementing this activity with support from a facilitator. The activities carried forward by the facilitator are described below.

CCCAM meetings.

The CCCAM coordinator summoned two meetings (in October and December) but only the one scheduled for December was held because the one for October lacked quorum.

In the December meeting, a summary of CCCAM was provided and which led to the following conclusion: the incorporation of a CCCAM facilitator was important for the DGB and through which it has been possible to position the issue of corridors both within the DGB as well as SERNAP. The negative aspect is that the daily activities of the DGB absorbed the vast part of the facilitators time. Another aspect was that initially an interest was noticeable in regards to the CCCAM, but its usefulness was not made evident because, when summoned, the CCCAM was the least important in relation to other activities and in the end, the interest in participating decreased. However the exchange of information among the members of the CCCAM was positive.

- b. Support the elaboration of the conceptual proposal for the CAM with the organizations that make up the Coordinating Committee and with other organizations linked to the CAM (elaborate the conceptual and operational basis in order to generate opportunities to discuss the establishment of corridors).
- National Policy on Corridors.

Based on the two workshops held within the Ministry of Sustainable Development, with the participation of several relevant actors (SERNAP, DGB, DGMA, DGCRH, DGDF, Office for Land use Planning, and Office for Strategic Planning), plus the input from other workshops held during previous trimesters, a second Policy on Biodiversity Corridors was drafted. On the other hand, it was concluded that the policy is a process and thus it is not sufficient to just draft a document. On the contrary, it is a learning and construction process requiring permanent action.

To continue with the validation process, the second draft of the Policy on Biodiversity Corridors was presented to the Vice Ministry for Natural Resources and the Environment for their consideration.

Regarding the Vice Ministry for Planning and Land Use, the participation of the Director for Planning was made possible. In summary, the suggestions from this office were oriented towards the fact that the implementation of corridors should be integrated into the process for local and national development.

In terms of the Land Use Planning Unit, also under the Vice Ministry for Planning and Land Use, they also felt that it was a good opportunity to incorporate aspects related to conservation and sustainable use into the development of Municipal Plans for Land Use.

c. Carry out workshops to establish a conceptual vision of the CAM and define mechanisms to incorporate the concept within different governmental entities.

During this trimester, two workshops were held regarding the development of the policy on Corridors. Both were held within the Ministry for Sustainable Development in which SERNAP, DGB, DGMA, DGCRH, DGDF, Land Use Planning Unit and Office for Strategic Planning participated. During these workshops the different aspects touched upon in the first draft of the policy were discussed. In general, during the workshops good perspectives were seen regarding the positive interaction between the different Ministry offices.

#### Objective III: Education, information, and environmental awareness:

#### Activity 3.1.: Hiring of staff to run the Center and guarantee its operations.

This activity includes actions ranging from the hiring of staff for the administration of the interpretive Center to the organization and planning of visits to the Center and La Yunga for students from 10 municipalities that encompass the Amboro National Park or adjacent to it, in support of their academic formation as well as improving their perception of the PA.

a. Hiring staff to administer the Interpretation Center as well as to explore how the Center can be co-administered between the Amboró Protected Area and the Municipality.

The Amboro Protected Area, with support from the technical team hired during previous months, was able to develop and obtain approval of the following documents:

- A proposal presenting the Model for the Administration of the Interpretation Center based on the guidelines for the protected area. The proposal includes an organizational chart, description of functions and scope of responsibilities. Based on this model, it is intended to plan, organize, integrate, direct and control the activities carried out by the Center. It also includes a manual for procedures, regulations for the use of equipment and space, and a budget for the management and functioning of the Amboro Interpretation Center.
- A manual for guides aimed at orienting them towards providing better services to visitors.

In addition, a co-administration agreement for the Center was established between el SERNAP (Amboro Protected Area) and the Municipal Government of Buena Vista through the signing of a letter of intention for the co-administration of the Center between both entitities.

Follow-up was carried out for all of the activities implemented in the Center including the visits on behalf of schools and tourists. In addition, the good functioning of the Center has been verified, as well as the maintenance of gardens including orchids, and the maintenance of the pedestrian walkway. During the months of October and December 333 individuals visited the Center of which 50 were foreign tourists and

283 were Bolivians. Regarding the foreign tourists, no children were registered however in the case of the Bolivian visits, 67 were children.

Two strategies were established aimed at ensuring the sustainability of the Center: the first strategy is related to the production and sale of souvenirs and the second strategy is for a differential entrance fee to the Center and rental of the audiovisual room. The first strategy made progress with the signing of the contract with FUNDESNAP while the second strategy requires approval of the SISCO-APA (Payment System for the Amboro Protected Area).

On the other hand, a monitoring and evaluation plan has been designed for the environmental education activities related to the Center and under which progress is intended to be measured through a change in attitudes of the visitors and local population.

b. Organization and planning of visits of students from 10 municipalities to the Center and La Yunga, as en environmental education process for the communities surrounding the Protected Area and promote the functioning of the Interpretation Center (in the North) and in La Yunga (in the South).

A majority of these activities were concluded by REMA in the previous trimester. The pending activities are described below.

The analysis regarding the results of the student evaluations pre and post visit to the Interpretation Center and La Yunga were completed. Based on the different variables that were taken to see progress made, an increase in the knowledge regarding the Protected Area was observed. However, the most outstanding comment made was that the students were not totally satisfied because they had hoped to enter the Park and observe animals and forest in general.

On the other hand, an evaluation of the different organizations involved (SEDUCA, APA, ASITUR, "Guías del CIA" and the "Asociación de Emprendedores de Amboró") in general terms qualified the activity as being positive although there was not a very fluid coordination with the Protected Area and logistical problems were experienced mainly in La Yunga.

The writing and editing of the text resulting from the research work based on the "Past, Present and Future in my community" and "Our Friends the Plants" summons, was concluded. Now REMA is looking for funds for diagramming and publication.

An audiovisual documentary was concluded registering the student visits to the Center in Buena Vista and the Ecotourism Center in La Yunga. This documentary was presented in the AECI ("Agencia Española de Cooperación internacional" - Spanish Aid Agency-) for the SEDUCA authorities, municipal authorities and Amboro Protected Area.

## Activity 3.2.: The initiation of a program for the production and sale of souvenirs from the Protected Area.

Through a contract with FUNDESNAP the production of souvenirs for the Amboro Protected Area was made possible.

The first design phase was carried out during the last trimester and the production phase was carried out during this trimester. 3735 products were produced for commercialization (250 t-shirts with two different designs, 150 caps with three different designs, 50 sweatshirts with hood, 100 jackets with two different designs, 60 waist / hip pack, 300 key rings with three different designs, 300 buttons with three different designs, 300 pins with three different designs, 250 stickers for surface, 375 stickers for glass, 100 cups of three different designs, 300 pens with three different designs, 1,000 post cards with four different designs and 200 maps).

At the same time, 1,500 posters and 3,000 two page brochures were printed for the promotion of the products and 2000 labels were produced describing the Protected Area and its sponsors. On the other hand, counters were constructed to display the products and finally, the price for the items was established.

The third phase of the launching was on December 15, 2005 and was held in the Simón I. Patiño Center. Approximately 50 people attended of which 5 were journalists in addition to the association of tour agencies and people related to protected areas in Latin America which happened to be visiting Santa Cruz for a workshop on protected areas.

## Objective IV: Visualization and Identification of the Value of the Environmental Services Provided by Water Coming from Amboró and Carrasco.

The Conservation Strategy Fund (CSF) made the following progress during this period:

Once the ToR were discussed between FAN and the CSF, CSF signed an agreement with FAN to "establish basis for the biophysical-socioeconomic calculation to value the environmental services for the availability of water for irrigation systems, carbon sequestration and transportation of sediments in the Amboro and Carrasco National Parks".

In terms of the progress, we can mention the development of a drainage network in the selected watersheds as geo-databases ArcGis9.0 and a schematic network of the superficial flow as geo-database ArcGis9.0.

#### TABLE WITH FINAL ACCOMPLISHMENTS

Benchmark Number	Benchmark/Output	Status*
1.1.	❖ Institutional support for CIDEDER	Completed
1.2.	Hiring of two (2) farming and animal husbandry technicians as outreach and /or environmental promoters	Completed
1.3.	Support for the improvement of relations between promoters of the PA and neighboring populations	Completed
1.4.	A radio information and dissemination campaign regarding the values of the PA but also including programs of technical interest for the local population	Cancelled
1.5.	Carrying out a baseline diagnosis regarding the social conflicts and thus be able to clearly identify the information needs as well as those for conflict resolution	On-track
1.6.	Support the process to obtain legal paperwork	Cancelled
2.1.	CAM Coordinating Committee (CCCAM).	Completed
3.1.	<ul> <li>Hiring of staff to run the Center and guarantee its operations</li> </ul>	Completed
3.2.	The initiation of a program for the production and sale of souvenirs from the Protected Area	Completed
4.1.	Visualization and Identification of the Value of the Environmental Service Provided by Water Coming from Amboró and Carrasco	On-track

Status may include activities that are completed, on-track, delayed, mixed performance, or cancelled.

#### **PROJECT EVOLUTION**

The progress made by CIDES in the area Morochata has been important in the sense that participation has been carried out in meetings organized on behalf of the CSUTCOA and in which CIDES has presented its proposal. However, the trust that the leaders have in CENDA (Andean Center for Communication and Development) make it difficult to make progress with the unions because, as they point out, any work in the area should be with the participation of CENDA, reason for which there was a meeting between the leaders of CSUTCOA, CENDA and CIDES to see how they can work in a coordinated and complementary manner.

However, the demands made on behalf of the unions and for which progress has been made in terms of communication and the CSUTCOA, are for support in the productive area. This has concerned CIDES because it implies considerable investment in terms of funds. On the other hand, CIDES proposes that it should be taken into consideration that conservation activities alone can not be carried out without supporting community development. It is necessary to take the necessary measures regarding the productive activities in such a way so as to not assign more importance to this aspect and end up increasing the threats. It is important to guide the steps towards the conservation of certain area to achieve "sustainable development". The establishment of land title clearing might possibly help identify and clarify the areas that are possible for certain uses and which are a priority for conservation.

CIDEDER, within the Municipality of Tiquipaya, mainly in the northern section of the municipality, has been able to consolidate its relations with the communities and municipal government. The communities have internalized the importance regarding the conservation of their natural resources and of utilizing this strategy to channel funds. Thus they have been able to create the Tiquipaya Flora and Fauna Reserve through a municipal regulation which will be ratified through a prefectural resolution carried forward with the municipal government. To begin managing the Reserve the municipality will convoke a meeting with the organizations that have interest in supporting activities in the area in such a way so as to have an initial management plan for the Reserve and its natural resources. However, it is important to work both with the municipal government as well as with the communities so that it is clear what exactly is meant in terms of managing a Reserve.

#### CARTA DE INTENCIONES

Carta de Intenciones suscrita entre la Alcaldía Municipal de Buena Vista (HAMB)y el Área Protegida Amboró (APA), para el funcionamiento y administración del Centro de Interpretación Ambiental Amboró de Buena Vista (CIA)

### MECANISMOS DE COORDINACIÓN.

Para una buena coordinación institucional de las actividades del CIA, se ha definido dos niveles de coordinación:

- Nivel Ejecutivo Estará conformado por el Honorable Alcalde Municipal de Buena Vista y el Director del Área Protegida Amboró, quienes trimestral mente se reunirán para tratar el manejo del CIA.
- ✓ Nivel Operativo.- Conformado por dos técnicos del HAMB, dos técnicos de APA y la administración del CIA, quienes se reunirán periódicamente para dar un seguimiento al funcionamiento del Centro

### RESPONSABILIDADES CONJUNTAS.

- √ Área Protegida Amboró (APA) y la Honorable Alcaldía de Buena Vista (HAMB) deberán respetar los usos de los espacios como construcciones y senderos y jardines establecidos que son parte del CIA.
- ✓ APA y el HAMB coordinarán y desarrollarán acciones conjuntas en temas de interés común y de beneficio mutuo, como ser:
  - a) Acciones y planificaciones de actividades de temas relacionados con la Gestión Ambiental.
  - b) Acciones y planificación de actividades que coadyuven en la gestión turística del APA así como del Municipio de Buena Vista.
- ✓ APA y la HAMB deberán buscar alternativas y gestionar financiamiento para garantizar la sostenibilidad a mediano y largo plazo del funcionamiento y mantenimiento del CIA, mantenimiento, material, equipo, personal, programas, etc.



✓ La Administración de los recursos generados por el CIA y la distribución del mismo se efectuará de acuerdo a las normas instituidas por el Servicio Nacional de Áreas Protegidas, debiendo dar prioridad al mantenimiento y mejoras del CIA, así como a la ejecución de proyectos relacionados con la protección del medio ambiente y el manejo sostenible de recursos naturales; la ejecución de estos proyectos serán previamente coordinadas entre las partes suscribientes. selección y contratación del personal del CIA.

 Coparticipar en la elaboración de los Términos de Referencia del personal del CIA, en caso de cofinanciamiento.

### RESPONSABILIDADES INSTITUCIONALES.

De las responsabilidades del APA.

- ✓ Elaborar el Modelo Administrativo para el buen funcionamiento del CIA.
- ✓ Informar a la HAM Buena Vista sobre la Gestión en la administración del CIA.
- Gestionar recursos destinados al funcionamiento y mantenimiento del CIA, materiales y equipos que se obtengan como resultado de las alternativas de sostenibilidad.
- Incluir como parte del Centro de Interpretación, todos los activos, materiales y equipos (muebles e inmuebles) destinados que sean adquirido, donados para el CIA.
- Incorporar todos los activos, materiales y equipos en el sistema de seguros contra contingencias.
- Velar por la protección de la infraestructura y equipos.

De las responsabilidades de Alcaldía de Buena Vista.

- Coadyuvar en la protección de la infraestructura, realizando mantenimiento de las calles aledañas al CIA e iluminación pública.
- Promover la difusión del CIA, a través de diferentes actividades como la cobertura de los medios radiales, letreros de aviso, con colegios y escuelas, entre otras.

Osvaldo Aramayo
Director del APA

Cap: Bladimir Chávez Alcalde del Municipio de Buena Vista

> Cap. Eith, r Bladimir Chávez Rosa Honorable alcalde hunicipal

SUCHAVISTA . PROV. ICHILO

#### Annex 2. Municipal regulation for the creation of the Tiquipaya Flora and Fauna Reserve.



### HONORABLE CONCEJO MUNICIPAL DE TIQUIPAYA

23 DE SEPTIEMBRE 1957

#### ORDENANZA MUNICIPAL No. 49/2005

#### EL HONORABLE CONCEJO MUNICIPAL DE TIQUIPAYA

#### CONSIDERANDO:

Que, la ley del medio ambiente Nº 1333, ha prescrito la necesidad de proteger espacios geográficos de biodiversidad y paisajísticos

Que, la planificación espacial de la zona tropical de Cochabamba identifica al norte del municipio de Tiquipaya como área de conservación, misma que se encuentra refrendada por el programa forestal para el trópico de Cochabamba (1998),

Que, mediante el decreto supremo Nº 26079/2001 se aprueba el plan de uso de suelo (PLUS) para el departamento de Cochabamba el cual define tierra de producción forestal permanente el norte del municipio de Tiquipaya

Que, la ley 2028 de Municipalidades, otorga a los gobiernos municipales la responsabilidad de preservar y mantener el medio ambiente resguardando el ecosistema de la jurisdicción., dentro esas atribuciones, el Gobierno Municipal de Tiquipaya Promulgo la Ordenanza Municipal Nº 21/1997 declarando a la zona norte del municipio como refugio ecológico y zona de redoblamiento forestal y que posteriormente es ratificada mediante ordenanza municipal 53/2001 en base a la propuesta de creación del parque departamental de Altamachi.

Que, la creación de la Reserva Municipal de Flora y Fauna responde a las aspiraciones del municipio de Tiquipaya para iniciar un proceso conjunto y armónico de conservación y desarrollo rural de las comunidades involucradas dentro del marco del aprovechamiento sostenible de los recursos naturales de importancia mundial.

Que, su ubicación espacial en las últimas estribaciones de la cordillera oriental la confieren como una de las áreas más diversas y mejor conservadas en el país.

Que, además se encuentran una buena representación de fauna de grandes mamíferos, entre ellos están el Jucumari, la Taruca, el zorro andino, el Tunki y de flora muchos de ellos endémicos y nuevos para la ciencia.

Que, la Reserva Municipal de Flora y Fauna constituye un nexo importante de conectividad entre áreas protegidas del país tanto de los departamentos de Cochabamba como el departamento de Santa Cruz de la Sierra (Territorio Indígena Parque Nacional Isiboro Secure, Parque Nacional Carrasco. Parque Nacional Amboro). condición que asegura la perdurabilidad de los procesos ecológicos y evolutivos, así como el desarrollo de las poblaciones de flora y fauna.

**Que**, las comunidades de San Luis y Carmen Pampa han emitido un voto resolutivo manifestando su conformidad con la Reserva Municipal de Flora y Fauna, por cuanto ven en ella su esperanza de desarrollo armónico sostenible.

## HONORABLE CONCEJO MUNICIPAL DE TIQUIPAYA

23 DE SEPTIEMBRE 1957

da Reserva Municipal de Flora y fauna se constituye en una buena opción para el conservación, el ecoturismo, el aprovechamiento de recursos genéticos, el mantenimiento de servicios ambientales y el evitar la perdida de suelos y de toneladas de carbono, entre otras ventajas.

Que. la Reserva Municipal de Flora y Fauna asegura el mantenimiento de espacios territoriales y de culturas vivas manteniendo y fortaleciendo las costumbres y tradiciones.

#### POR TANTO:

El Honorable concejo Municipal, en uso de sus legítimas atribuciones que le confiere la Constitución Política del Estado. Ley 2028 de Municipalidades y la Ley 1551 de Participación Popular dicta la presente:

#### ORDENANZA

Artículo Primero.- Declárese Reserva Municipal de Flora y Fauna la zona Norte de Tiquipaya en una extensión superficial de 184.217.6632 Hectares, que se encuentra dentro las siguientes coordenadas:

Nº	Descripción del punto	Este	Norte
1	Confluencia de los ríos Torreni y Altamachi	795525	8144060
2	Confluencia de los ríos Altamachi y Yana Khakha	801875	8144850
3	Confluencia de un río sin nombre con el Altamachi	801151	8154955
4	Confluencia de los ríos Altamachi con río sin nombre	800000	8160995
5	Confluencia de los ríos Altamachi y el Mal Paso	805070	8168060
5	Confluencia del ríos Altamachi y otro sin nombre	801489	8171950
7	Cima de un cerro sin nombre de la cordillera de Mossetenes	804060	8172405
8	Cima de un cerro sin nombre de la cordillera de Mossetenes	807965	8169895
9 .	Cima de un cerro sin nombre con 1919 MS de altura de la Coordde Mossetenes	811325	8167310
10	Cima de un cerro sin nombre de la cordillera de Mossetenes	814365	8163430
10	Cima de un cerro sin nombre de la Coordde Mossetenes	815395	8163892
11	Cima de un cerro sin nombre con 1968 msnm de altura de la	817410	8161960
13	Coordde Mossetenes Cima de un cerro sin nombre con 1949 msnm de altura de la Coordde Mossetenes	818920	8158175
14	Cima de un cerro sin nombre con 2050 msnm de altura de la Coordde Mossetenes	821965	8154302
15	Cima de un cerro sin nombre con 1871 msnm de altura de la Coordde Mossetenes	824151	8150956
16	Cima de un cerro sin nombre de la cordillera de Mossetenes	825725	8149360
17	Cima de un cerro sin nombre con 1682 msnm de altura de la Coordde Mossetenes	824866	8147195
18	Cima de un cerro sin nombre de la cordillera de Mossetenes	825070	8146215
19	Cima de un cerro sin nombre con 1986 msnm de altura de la Coord, de Mossetenes	824352	8141990
20	Cima de un cerro sin nombre con 2487 msnm de altura de la Coordde Mossetenes	822550	813966
21	Cima de un cerro sin nombre con 3067 msnm de altura de la Coordde Mossetenes	821145	813739

## HONORABLE CONCEJO MUNICIPAL DE TIQUIPAYA

23 DE SEPTIEMBRE 1957

			1010000
	Cima de un cerro sin nombre con 2983 msnm de altura de la Coordde Mossetenes	821445	8135000
	Cima de un cerro sin nombre con 3358 msnm de altura de la Coordde Mossetenes	817695	8132701
24	Cima de un cerro sin nombre de la cordillera de Mossetenes	816272	8130702
25	Cima de un cerro sin nombre de la cordillera de Mossetenes	818252	8127352
26	Cima de un cerro sin nombre de la cordillera de Mossetenes	818890	8126795
27	Cima de un cerro Juchuy Niño Rumi Punta con altura de 3466 msnm de la cordillera de Mossetenes	818430	8126370
28	Cima de un cerro sin nombre de la cordillera de Mossetenes	817905	8125750
29	Cima de un cerro sin nombre	817310	8125502
30	Cima de un cerro sin nombre	816352	8123249
31	Cima de un cerro sin nombre	815705	8121650
32	Cima de un cerro Punta Pampilla	814080	8121512
33	Cima de un cerro sin nombre de la Cordillera Yana Khakha	813160	8119145
34	cima del cerro sin nombre, con altura de 3856 msnm, de la cordillera Yana Khakha;	811302	8119255
35	Cima del cerro Huanca Hauarina de la cordillera Yana Khakha;	808010	8120089
36	Cima de cerro Raymundo Khasa	806452	8118322
37	Confluencia del río sin nombre y el río Torreni	805230	8117200
38	Confluencia del río sin nombre y el río Torreni	807100	8114860
119	Cima del cerro Toro Khollu	785950	8117475
120	Cima del cerro Silla Orkho	783775	8119073
121	Naciente del río Chaqui Waykho	780910	8119550
122	Intersección de los ríos Totorani y Chaqui Waykho	779595	8120000
123	Eje del río Misicuni	779500	8120225
124	Confluencia de los ríos Mal Paso y Misicuni	781000	8121750
125	Inicio del río Altamachi	785225	8125250
126	Confluencia de los ríos Real Mayu y Altamachi	786750	8126250
127	Confluencia de los ríos Cumbre y Altamachi	788600	8134550
128	Confluencia de los ríos Feliciano y Altamachi	786680	8138550
129	Confluencia de los ríos Cristal Mayu y Altamachi	787080	8141700
130	Confluencia de los ríos Khellu Mayu y Altamachi	791175	8145350

Artículo Segundo.- La zona destinada a la reserva de flora y fauna servirá paragarantizar la continuidad y la evolución de los procesos ecológicos y alentara a la investigación científica formando investigadores científicos de las comunas involucradas.

Articulo Tercero.- El Croquis Geo Referenciado aludido a la Presente Ordenanza será formara parte indisoluble de la misma.

Articulo Cuarto.- El Órgano Ejecutivo es el encargado de cumplir y hacer cumplir la presente Ordenanza Municipal, conforme las atribuciones definidas por la Ley 2028 de Municipalidades.

PUBLIQUESE, CUMPLASE, REGISTRESE Y ARCHIVESE

Es dada en Sala de sesiones del H. Concelo municipal de Tiquipaya a los ventitrés días del mes de diciembre de 2005.

SATUL CHIZ PARAO PRESILITE CONCEJO MUNICIPAL DE TIQUIPAYA Prov. QUILLACOLLO

WWF "For a Living Planet"

Revised 02/07/06

Annex 3. Photographs of the souvenirs produced by the Amboro Protected Area.



#### Annex 4. Two stories of "telling our story".

#### 1. SUCCESS STORY

# Environmental Education strengthens the conservation process and local initiatives

#### Leaving the classroom to learn more.

Since the year 2000, the NGO REMA (Rescate en tus Manos) has been working in the Amboró Protected Area and as of 2003, it has been working with WWF and USAID in the design regarding the content and implementation of environmental education activities for the Amboró Interpretation Center located in Buena Vista as well as the Ecotourism Center La Yunga located in Mairana.

These educational activities, based on the Audubon's Schoolyard Ecology Methodology\*, have involved students in the community but also teachers, parents and authorities from several neighboring municipalities surrounding the Amboró Protected Area.

One of the activities tending to strengthen research and contribute to conservation as well as the teaching-learning process has been, among others, the educational Project with the municipalities of San Carlos, Yapacaní and Buena Vista.

The objective of this Project has been to ensure that the Amboró Interpretation Center is considered as a pilot experience in terms of developing a relationship between a protected area and a municipality (and also the result of an important inter-institutional effort that included USAID) and can serve as an opportunity to generate and suggest educational and recreational activities for the adjacent municipalities in relation to the protected area, and thus promote a culture of conservation in general, especially for the Park that encompasses such incredible biodiversity.

The educational Project was coordinated between several oganizations such as the Departmental Educational Service (SEDUCA), the Amboró Protected Area, and REMA and launched among approximately 350 schools a field research contest under the following themes: "Past, present and future of my community" and "Our friends the plants". This stimulated the students to carry out research efforts and over 250 projects were turned in contributing to the natural history of the local communities. This contest also contributed to the fact that both Centers were visited by more than 1,000 students and to a lesser degree, by teachers and parents from the communities.

The winning teams were awarded with visits to the La Yunga Ecotourism Center and the Amboró Interpretation Center and constituted an opportunity to visit another area outside of their community, like the ones mentioned above, as well as share and strengthen their education through a direct contact with nature. Thanks to this exchange, both Centers are being consolidated as areas for students from grade and high school to share the results of their research and introduce concepts related to conservation and management of natural resource in the region.

In addition, the trips stimulated the local economy considering that the visits to both Centres increased the demand for local food and beverages.

The experience of the trip for the children was also motivational because it continued to expand their knowledge regarding the Amboró National Park and thus will contribute to the formation of future environmental leaders in the area.

"The Audubon Schoolyard Ecology Initiative Schoolyard Ecology is an education initiative devoted to make ecology and conservation science accessible to schoolteachers, children and parents through first-hand experience of local ecological processes and human effects on the environment. The Schoolyard Ecology consists of a combination of training workshops, educational materials, and a communications network to provide guidance to all participants".

Source: http://www.audubon.org/local/latin/

#### 2. CASE STUDY

### SEEKING SUSTAINABBILTY IN PROTECTED AREAS

Souvenirs to support the Amboró Protected Area

#### Challenge

Protected areas in Bolivia encompass incredible natural and cultural richness but the lack of a secure and sustainable source of funding affects the effective management of the National System for Protected Areas (SERNAP).

The Amboro National Park is no exception. This protected area, located towards the west of the city of Santa Cruz de la Sierra, is bordered by the two main highways that connect this city with the rest of the country, and has four major biomes within its 637,600 ha: the Amazon, Chaco, Cerrado and the Andes, encompassing an incredible wealth in terms of biodiversity that includes approximately 3,000 species of plants, 100 amphibians, 100 reptiles, 800 birds and 120 mammals, making it one of the most important areas of Bolivia's natural patrimony.

Its landscape beauty and closeness to the most densely populated region in the department make Amboro one of the most popular protected areas with hundreds of tourists visiting its rivers, waterfalls, forests and mountains.

#### Initiative

For the first time in Bolivia a process has been begun that allows generating resources to contribute to the management of a protected area – in this case Amboro National Park.

This initiative is about producing and commercialization of products that promote the area, such as cups, t-shirts, key rings and others. The sale of these items also allows creating a small seed fund for this program as well as beginning generating resources for the area.

To support this initiative, USAID, through WWF, the global conservation organization and FUNDESNAP (Foundation for the Development of the National System for Protected Areas), has financed the launching of this initiative specifically through the first batch of souvenirs for commercialization.

One of the locations where the souvenirs are sold is of course the Amboro Interpretation Center in Buena Vista, which is visited by more than 2,000 students and tourists each year.

#### Results

The official launching of the souvenirs was on December 14, 2005 and until January 2006 the stock for several of the items has been sold out. The success of the initiative lies in that the funds generated form this first sale continues to finance the future production of more material.

In addition, with this campaign, together with FUNDESNAP, it is hoped that other protected areas at the national and departmental level, will be motivated to follow the initiative and replicate the experience in their areas.